IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of : ENZMANN Mark J.   )
)
Serial No. 10/742,153   )   Group Art Unit: 2681
)
Filed: December 19, 2003   )   Examiner: DESIR, Pierre Louis
)
For: METHOD AND APPARATUS FOR   )
PROVIDING SEAMLESS CALL HANDOFF   )
BETWEEN NETWORKS THAT USE   )
DISSIMILAR TRANSMISSION ELEMENTS)

37 C.F.R. § 1.131 DECLARATION

Mail Stop RCE   January 19, 2006
Commissioner of Patents and Trademarks
P.O Box 1450
Alexandria, Virginia 22313-1450

Sir:

I, Mark J. Enzmann, declare as follows:

1.   This declaration is to establish completion of the invention of the above-identified application, Ser. No. 10/742,153, filed December 19, 2003 in the United States at a date at least as early as September 12, 2003.

2.   The effective filing date of the Examiner-cited prior art publication by Jagadeesan et al is September 12, 2003.

3.   I am the named inventor of the above-identified application.

4.   I conceived of this invention on a date prior to the September 12, 2003 filing date of the Jagadeesan et al reference.

5.   Attached hereto is a copy of an internal invention record, with some information redacted. This invention record was created by me within my corporate environment before the September 12, 2003 filing date of the Jagadeesan et al reference.

6.   Applicant has been diligent from the time of his conception of the invention up to the filing of this patent application. It can be appreciated that the invention was made in a corporate environment and that it takes the corporation some finite amount of time to act on an internally-made invention and to then file a patent application therefore.

7.   I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

By: _____   Date: _____

Mark J. Enzmann

INTELLECTUAL PROPERTY STRATEGIC MANAGEMENT
LEGAL USE ONLY

Disclosure No.: ███████████	Date ███████████

Handwritten note (right margin): URGENT / Original submission date to CC. / *LSS*

Invention Disclosure Form

1. What can we call your invention? (10 words or less)
Call Handoff from dissimilar transports.

2. Who do you think contributed to the conception of your invention?
List yourself and the people who may be inventors. (Use additional sheets if necessary)

Mark Enzmann		
Name Printed	Signature	Date

Current Cingular Employee? ☒ Yes ☐ No   Network Strategic Planning
                                          Business Unit

(404)249-0723	(404)236-5949
Telephone Number	Fax Number

5565 Glenridge Connector #960	Atlanta, Ga 30342	
Business Address	City, State, Zip	

Name Printed	Signature	Date

Current Cingular Employee? ☐ Yes ☐ No   _____
                                          Business Unit

Telephone Number	Fax Number

Business Address	City, State, Zip	

Name Printed	Signature	Date

Current Cingular Employee? ☐ Yes ☐ No   _____
                                          Business Unit

Telephone Number	Fax Number

Business Address	City, State, Zip	

3. Who will be the point of contact for further information?

Name:	Mark Enzmann
Telephone	(404)249-0723

4. What is your invention? (please attach additional sheets (as much information as you feel is necessary) to describe your concepts - flow charts and/or block diagrams can be very helpful. In preparing this description, try to address the following:

    a) What have others done in the past (or, do now) – i.e. what is the problem that was solved?

    b) What makes your invention new or different from what was done before – i.e. what is your solution?

    c) What makes your invention better than what was done before?

This invention describes a method to continue an inprogress communication across networks with dissimilar transmission methods. In particular the involved networks would be 802.11 specification and Cellular data specification of any of the following: GPRS, 1XRT, 3XRT, EDGE, etc.

The method is currently written with the call initiation occuring on the 802 leg but that is not to say that the reciprical direction is not valid. A reversal of the steps would accomplish the transition from Cellular data to 802.

The attached visio diagrams give visual representation to the steps.

The technology used to accomplish this task is partially residing in the terminals and network today. There will be suttle changes in the sensing circuits of a terminal that has both 802 and cellular data capabilities incorporated. Many PDAs already have this ability. The kernel code envisioned is simular to code currently in use in cellular networks to aid in cell to cell handoff of a cellular voice call.

5. Two witnesses (who are not inventors) must attest to the fact that they read and understand the attached description. The Witnesses must sign below and initial and date each page of the attached description.
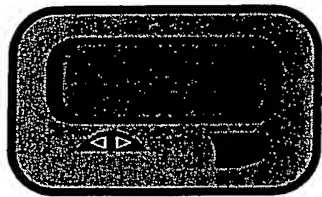
Witness Name	Signature	Date

Witness Name	Signature	Date

E-mail this form and the Matrix to: mailto:ipdisclosures@cingular.com

Wireless Handoff
Step 1

AP (Access Point)
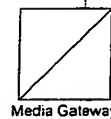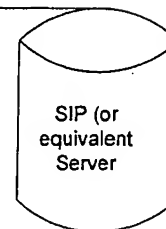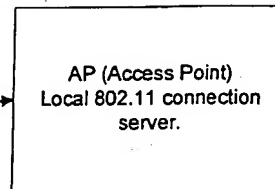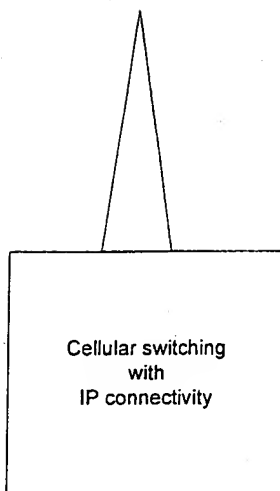Local 802.11 connection
server.

Wireless Device
With 802.11 and
Cellular capability

Start

The wireless device is currently
connected to the internet or an
intranet via 802.11 architecture.
The device has initiated a voice call
to the terminating station over the
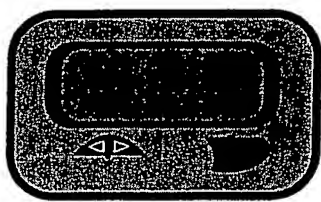802.11 connection.

SIP (or
equivalent
Server

Media Gateway

Cellular switching
with
IP connectivity

LEC Switch
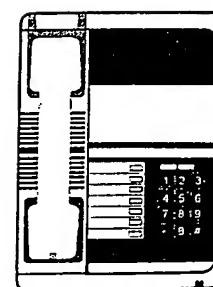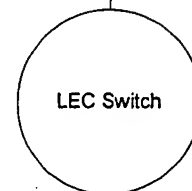
Terminating Station

Wireless Handoff
Step 2

AP (Access Point)
Local 802.11 connection server.

Wireless Device
With 802.11 and
Cellular capability

Query for signal and IP connectivity

Change begin

The wireless device while currently connected to the terminating station over the 802.11 connection. Is moving out of range of the AP. In this case also out of range of the 802.11 connection. The device, wishing to continue the connection, will use the cellular capability to query the local service provider for capacity and capabilities.
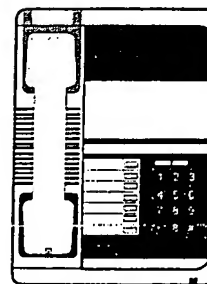
SIP (or equivalent Server

Media Gateway

LEC Switch

Cellular switching
with
IP connectivity

Terminating Station

W eless Handoff
Step 3

AP (Access Point)
Local 802.11 connection
server.

Wireless Device
With 802.11 and
Cellular capability

Change end

The wireless device will use the cellular
query response to establish an IP connection
to the local provider.
The IP connection information to the Server
will be updated with the new IP addressing
(similar to DNS updates) via the 802 connection
and the voice connection will move to the newly
established Cellular IP connection.
The 802 connection will be severed

SIP (or
equivalent
Server

Establish IP connection

Media Gateway

LEC Switch

Cellular switching
with
IP connectivity

Terminating Station